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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/822,668	KIMURA ET AL.
	Examiner	Art Unit	
	VENKATESH HALIYUR	2419	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *11/10/2008*.

2a) ☒ This action is FINAL.　　2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-27 (calims 2,11,20 are canceled)* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1,3-10,12-19,21--27* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *13 April 2004* is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　a) ☒ All　b) ☐ Some * c) ☐ None of:

　　1. ☒ Certified copies of the priority documents have been received.

　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.

　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   The amendment filed on 11/10/2008 has been considered but is ineffective to

overcome the references. Rejection follows.

2.   Claims 1-27 is pending in the application. Claims 2, 11, 20 are canceled.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section
> 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to
> which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1,3-10,12-19,21-27, are rejected under 35 U.S.C. 103(a) as being

unpatentable over Burwell et al [US Pat: 5,818,842] in view of Rodrig et al [US Pat:

6,256,314].

        Regarding claim 1, Burwell et al in their invention of "Transparent Interconnector

of LANs by an ATM Network" disclosed an ATM (Asynchronous Transfer Mode) bridge

device **(item 6 of Fig 1)** to which an ATM network **(items 1a-1c of Fig 1)** and a layer 2

network **(items 9-11,14 of Fig 1)** are connected **(col 4, lines 22-38)**, comprising: a first

learning unit **(server, item 4 of Fig 4)** item to learn a transmitter address of a packet

input from said ATM network and information about a transmission path through which

said packet had been transmitted and to judge a destination of said packet based on a result from the learning **(col 4, lines 49-61)**, a second learning unit **(ridge, item 6 of Fig 1)** to learn a transmitter address of a packet input from said ATM network and information about a transmission path to which said packet is to be output **(col 7, lines 29-34)**; and a packet scrapping judging unit to compare said transmitter address of said packet input from said ATM network and information about said transmission path through which said packet had been transmitted with said transmitter address of said packet learnt by said second learning unit and information about said transmission path to which said packet is to be output **(ridge packet filtering, item 6 of Fig 1, col 8, lines 15-24)**. Burwell disclosed a method for verifying the source address, destination address and the protocol type of the packet to either drop or forward the packet at the ridge **(col 8, lines 25-31, col 11 lines 50-60, col 12, lines 6-15)** and Burwell et al further disclosed wherein, when a packet is transmitted from a first device on the ATM network side to a second device on said ATM network side **(communication between ATM user devices, col 3, lines 6-25)**, a loop-back transmission mode is set to said packet to be received by said second device **(Loopback type code set in the cells, col 6, lines 32-44)**, but fails to disclose if said transmitter address of said packet input from said ATM network and information about said transmission path through which said packet had been transmitted are matched with said transmitter address of said packet learnt by said second learning unit and information about said transmission path to which said packet is to be output, to scrap said packet. However Rodrig et al in the invention of "Apparatus and Methods for Routerless Layer 3 Forwarding in a Network"

disclosed a method for comparing the address of a packet received from a first routing station and information about the transmission path through which packet had been transmitted are matched learnt and matched by the second routing station to either discard or receive the packet **(col 15, lines 20-67, col 16, lines 1-46, Figs 6-9).** Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of comparing the address of a packet received from a first routing station and information about the transmission path through which packet had been transmitted are matched and learnt by the second routing station to either drop or forward the packets arriving at the bridge device as taught by Rodrig et al in the system of Burwell et al to verify if said transmitter address of said packet input from said ATM network and information about said transmission path through which said packet had been transmitted are matched with said transmitter address of said packet learnt by said second learning unit and information about said transmission path to which said packet is to be output, to scrap said packet. One is motivated as such in order to improve the performance of the ATM bridge device for transmitting packets over WAN network by comparing the address of a packet received from a first routing station and information about the transmission path through which packet had been transmitted are matched and learnt by the second routing station to either drop or forward the packets arriving at the bridge device **(Rodrig, col 3, lines 28-52).**

Regarding claim 10, Burwell et al disclosed a loop detecting method for detecting loop formed in an ATM bridge device **(item 6 of Fig 1/Fig14, col 6, lines 45-54)** to

which an ATM network **(items 1a-1c of Fig 1)** and a layer 2 network **(items 9-11,14 of Fig 1)** are connected **(col 4, lines 22-38)**, comprising: a first learning step **(server, item 4 of Fig 4)** item to learn a transmitter address of a packet input from said ATM network and information about a transmission path through which said packet had been transmitted and to judge a destination of said packet based on a result from the learning **(col 4, lines 49-61)**, a second learning step **(ridge, item 6 of Fig 1)** to learn a transmitter address of a packet input from said ATM network and information about a transmission path to which said packet is to be output **(col 7, lines 29-34)**; and a packet scrapping judging step to compare said transmitter address of said packet input from said ATM network and information about said transmission path through which said packet had been transmitted with said transmitter address of said packet learnt by said second learning step and information about said transmission path to which said packet is to be output **(ridge packet filtering, item 6 of Fig 1, col 8, lines 15-24)**. Burwell disclosed a method for verifying the source address, destination address and the protocol type of the packet to either drop or forward the packet at the ridge **(col 8, lines 25-31, col 11 lines 50-60, col 12, lines 6-15)** and Burwell et al further disclosed wherein, when a packet is transmitted from a first device on the ATM network side to a second device on said ATM network side **(communication between ATM user devices, col 3, lines 6-25)**, a loop-back transmission mode is set to said packet to be received by said second device **(Loopback type code set in the cells, col 6, lines 32-44)**, but fails to disclose if said transmitter address of said packet input from said ATM network and information about said transmission path through which said packet had

been transmitted are matched with said transmitter address of said packet learnt by said

second learning step and information about said transmission path to which said packet

is to be output, to scrap said packet. However Rodrig et al disclosed a method for

comparing the address of a packet received from a first routing station and information

about the transmission path through which packet had been transmitted are matched

learnt and matched by the second routing station to either discard or receive the packet

(col 15, lines 20-67, col 16, lines 1-46, Figs 6-9). Therefore it would have been

obvious for one of the ordinary skill in the art at the time the invention was made to use

the method of comparing the address of a packet received from a first routing station

and information about the transmission path through which packet had been transmitted

are matched and learnt by the second routing station to either drop or forward the

packets arriving at the bridge device as taught by Rodrig et al in the system of Burwell

et al to verify if said transmitter address of said packet input from said ATM network and

information about said transmission path through which said packet had been

transmitted are matched with said transmitter address of said packet learnt by said

second learning unit and information about said transmission path to which said packet

is to be output, to scrap said packet. One is motivated as such in order to improve the

performance of the ATM bridge device for transmitting packets over WAN network by

comparing the address of a packet received from a first routing station and information

about the transmission path through which packet had been transmitted are matched

and learnt by the second routing station to either drop or forward the packets arriving at

the bridge device **(Rodrig, col 3, lines 28-52).**

Regarding claim 19, Burwell et al disclosed an ATM (Asynchronous Transfer Mode) bridge device **(item 6 of Fig 1)** to which an ATM network **(items 1a-1c of Fig 1)** and a layer 2 network **(items 9-11,14 of Fig 1)** are connected **(col 4, lines 22-38)**, comprising: a first learning means **(server, item 4 of Fig 4)** item to learn a transmitter address of a packet input from said ATM network and information about a transmission path through which said packet had been transmitted and to judge a destination of said packet based on a result from the learning **(col 4, lines 49-61)**, a second learning means **(ridge, item 6 of Fig 1)** to learn a transmitter address of a packet input from said ATM network and information about a transmission path to which said packet is to be output **(col 7, lines 29-34)**; and a packet scrapping judging means to compare said transmitter address of said packet input from said ATM network and information about said transmission path through which said packet had been transmitted with said transmitter address of said packet learnt by said second learning means and information about said transmission path to which said packet is to be output **(ridge packet filtering, item 6 of Fig 1, col 8, lines 15-24).** Burwell disclosed a method for verifying the source address, destination address and the protocol type of the packet to either drop or forward the packet at the ridge **(col 8, lines 25-31, col 11 lines 50-60, col 12, lines 6-15)** and Burwell et al further disclosed wherein, when a packet is transmitted from a first device on the ATM network side to a second device on said ATM network side **(communication between ATM user devices, col 3, lines 6-25)**, a loop-back transmission mode is set to said packet to be received by said second device **(Loopback type code set in the cells, col 6, lines 32-44),** but fails to disclose if said

transmitter address of said packet input from said ATM network and information about

said transmission path through which said packet had been transmitted are matched

with said transmitter address of said packet learnt by said second learning means and

information about said transmission path to which said packet is to be output, to scrap

said packet. However Rodrig et al disclosed a method for comparing the address of a

packet received from a first routing station and information about the transmission path

through which packet had been transmitted are matched learnt and matched by the

second routing station to either discard or receive the packet **(col 15, lines 20-67, col

16, lines 1-46, Figs 6-9).** Therefore it would have been obvious for one of the ordinary

skill in the art at the time the invention was made to use the method of comparing the

address of a packet received from a first routing station and information about the

transmission path through which packet had been transmitted are matched and learnt

by the second routing station to either drop or forward the packets arriving at the bridge

device as taught by Rodrig et al in the system of Burwell et al to verify if said transmitter

address of said packet input from said ATM network and information about said

transmission path through which said packet had been transmitted are matched with

said transmitter address of said packet learnt by said second learning unit and

information about said transmission path to which said packet is to be output, to scrap

said packet. One is motivated as such in order to improve the performance of the ATM

bridge device for transmitting packets over WAN network by comparing the address of a

packet received from a first routing station and information about the transmission path

through which packet had been transmitted are matched and learnt by the second

routing station to either drop or forward the packets arriving at the bridge device

(Rodrig, col 3, lines 28-52).

Regarding claims 3, 12, 21, Burwell et al disclosed wherein, when a packet is

transmitted from a first device on the layer 2 network side **(ATM layer on switch side,**

item 30 of Fig 4, col 3, lines 17-25) to a second device on said ATM network side, a

loop-back transmission mode is set to said packet to be received by said second device

on said ATM network side **(col 6, lines 45-54).**

Regarding claims 4, 13, 22, Burwell et al disclosed wherein, when a packet is

transmitted by a broadcast method from a first device on said ATM network side to

other devices on said ATM network side **(col 3, lines 11-25, col 5, lines 34-37)** a loop-

back transmission mode is set to said packet to be received by a second device on said

ATM network side **(col 6, lines 45-54).**

Regarding claims 5, 14, 23, Burwell et al disclosed, wherein, when a packet is

transmitted by a broadcast method from a first device on said ATM network side to

other devices on said ATM network side **(col 3, lines 11-25, col 7, lines 44-50)**, a loop-

back transmission mode is set to said packet to be received by a second device and a

third device on said ATM network side **(col 6, lines 45-54)**.

Regarding claims 6, 15, 24, Burwell et al disclosed wherein, when a packet is

transmitted by a broadcast method from a first device on said layer 2 network side

(Ethernet side, item 23 of Fig 4, col 3, lines 11-25) to a device on said ATM network

side, a loop-back transmission mode is set to said packet to be received by a second

device on said ATM network side **(col 3, lines 17-25,col 9, lines 35-54)**.

Regarding claim 7, 16, 25 Burwell et al disclosed The ATM bridge device according to claim 1, wherein, when a packet is transmitted from a first device on said ATM network side to a first device on said layer 2 network side **(Ethernet side, item 23 of Fig 4, col 3, lines 11-25)**, a loop route is formed on said layer 2 network side **(col 3, lines 17-25)**.

Regarding claims 8, 17, 26, Burwell et al disclosed wherein logical transmission paths **(virtual paths)** to be used for bidirectional connection in said ATM network are different from each other **(col 10, lines 10-12, col 6, lines 32-35)**.

Regarding claims 9,18,27, Burwell et al disclosed the ATM bridge device **(item 6 of Fig 1)** that bridges ATM network and LAN **(col 4, lines 22-38)**, but fails to disclose a VRRP (Virtual Router Redundancy Protocol) is applied in said ATM network and said layer 2 network. However, Rodrig et al disclosed a redundancy routing mechanism involving a VRRP (Virtual Router Redundancy Protocol) when multiple routers back each other up in a network for the purposes of achieving routing redundancy in the network **(col 8, lines 8-23).** Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to use the method of a redundancy routing mechanism involving a VRRP as taught by Rodrig et al in the system of Burwell et al to include a VRRP (Virtual Router Redundancy Protocol) is applied in said ATM network and said layer 2 network in the ATM bridge device. One is motivated as such in order to use VRRP mechanism in the network to achieve a seamless routing ability in the ATM bridge device in the event of a change in the network topology.

Response to Arguments

5.   Applicant's argument, see remarks filed on 11/10/2008 for claims 1-27 have been

fully considered but they are not persuasive.

        With respect to applicant's argument for amended claims 1, 10, 19, that Burwell

fails to disclose, teach or suggest that the limitations of "when a packet is transmitted

from a first device on the ATM network side to a second device on said ATM network

side, a loop-back transmission mode is set to said packet to be received by said second

device" as claimed in the amended independent claims, however the examiner

respectfully disagrees and points applicants to the reference where Burwell et al further

disclosed when a packet is transmitted from a first device on the ATM network side to a

second device on said ATM network side (communication between ATM user devices,

col 3, lines 6-25), a loop-back transmission mode is set to said packet to be received by

said second device (Loopback type code set in the flow cells, col 6, lines 32-44) and

Burwell further disclosed a method for comparing the information in the packets to either

drop or forward the packets at the ridge in col 8, lines 25-31, col 11 lines 50-60, col 12,

lines 6-15.

        In response to applicant's argument that there is no suggestion to combine the

references, the examiner recognizes that obviousness can only be established by

combining or modifying the teachings of the prior art to produce the claimed invention

where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in

the art. In this case, both Burwell et al disclosed their invention in the related art of

transmission of packets over interconnected ATM, WAN and LAN networks and Rodrig

et al further disclosed methods for comparing packet information for forwarding packets

in an ATM-LAN interconnected networks. Therefore obviousness can be established by

combining or modifying the teachings of the prior art to produce the claimed invention

where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in

the art.

In response to applicant's argument that the references fail to show certain

features of applicant's invention, it is noted that the features upon which applicant relies

filter learning function, filter detection scrapping function and facing device (please see

specification related to Fig 3) are not recited in the rejected claim(s). Although the

claims are interpreted in light of the specification, limitations from the specification are

not read into the claims.

Conclusion

6.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

7.   Any inquiry concerning this communication or earlier communications should be

directed to the attention to Venkatesh Haliyur whose phone number is 571-272-8616.

The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00 PM. If

attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Edan Orgad can be reached @ (571)-272-7884. Any inquiry of a general

nature or relating to the status of this application or proceeding should be directed to the

group receptionist whose telephone number is (571)-272-2600 or fax to 571-273-8300.

8.   Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197(toll-free).

/Venkatesh Haliyur/

Examiner, Art Unit 2419

/Edan Orgad/

Supervisory Patent Examiner, Art Unit 2419